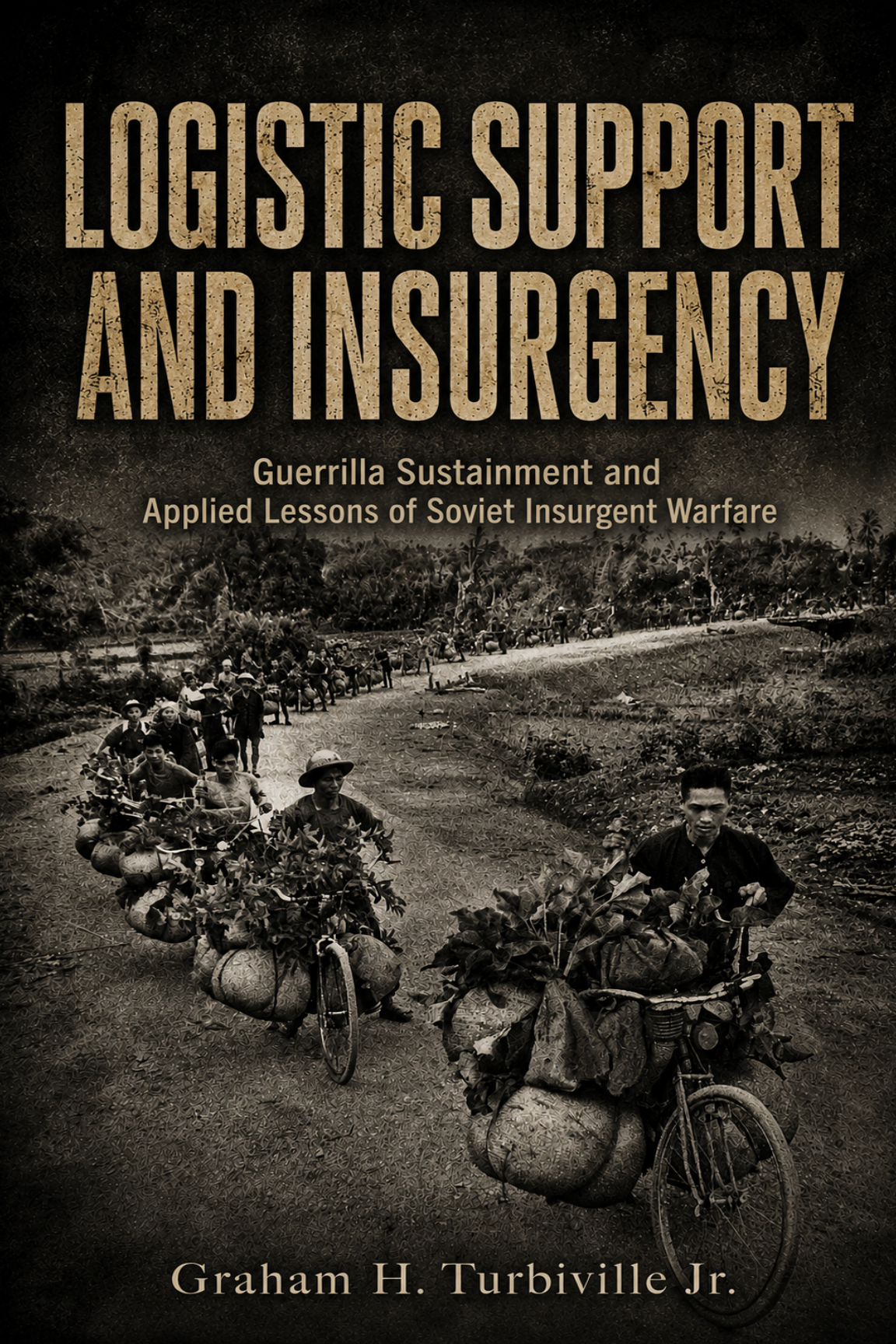
LOGISTIC SUPPORT AND INSURGENCY

Guerrilla Sustainment and Applied Lessons of Soviet Insurgent Warfare



Graham H. Turbiville Jr.

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Logistic Support and Insurgency

Guerrilla Sustainment and Applied Lessons of Soviet Insurgent Warfare: Why It Should Still Be Studied

Graham H. Turbiville, Jr.

JSOU Report 05-4
The JSOU Press
Hurlburt Field, Florida
2005

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ISBN 0-9767393-5-6

Foreword

This is a pertinent and timely study of a critical issue facing the United States military today: how do insurgents logistically sustain and expand their operations? Graham H. Turbiville, Jr. appropriately mentions Martin Van Creveld's excellent treatise, *Supplying War: Logistics from Wallenstein to Patton* but argues persuasively that a similar study on the role of logistics in unconventional or "small" wars is sorely needed. Dr Turbiville's essay discusses logistics and sustainment of guerillas operating in the Soviet Union behind German lines during World War II. The paper is a significant step in addressing the research shortfall on insurgency logistics.

Dr Turbiville posits there is a high correlation between Soviet Union planner's studies of Soviet partisan operations in World War II and how the USSR sponsored and supported insurgencies throughout the Cold War period. He effectively argues that this mindset "constituted the base upon which Soviet and Russian guerilla operations and support approaches and techniques were developed" in the 60 years since World War II. Turbiville clearly identifies how the Soviet perspective on the effectiveness of guerilla operations "constituted the most frequent means of shaping the course of military actions in low intensity conflict." Implicit in this paradigm is the critical link between Soviet special operations type units and partisan or guerilla activities.

A significant portion of the report discusses how the Soviet Union supplied guerilla forces during the war. Dr Turbiville emphasizes three distinct types of supply sources guerillas can use: local or prepositioned supplies, captured supplies, and supplies provided from external sources. Resupply by Soviet aircraft was an extremely important transportation medium used by the USSR. Although most insurgents fighting against the United States are unlikely to use aerial resupply due to US air supremacy, these three broad supply categories are still valid and are present in our current conflicts in Iraq and Afghanistan. One of the most valuable sections of Dr Turbiville's work is the superb recap in the essay's conclusion of thirteen key elements of insurgency sustainment. These elements are provided to establish a framework for further research and consideration. Although all are important, the discussions concerning the elements of supply, basing, and mine or weapon fabrication are especially relevant to today's operational environment.

Lt Col Michael C. McMahon
Director, JSOU Strategic Studies Department

Graham H. Turbiville, Jr. *is a Senior Fellow with the Strategic Studies Department, Joint Special Operations University (JSOU), Hurlburt Field, FL. Dr. Turbiville earlier served 30 years in intelligence community analytical and leadership positions at the Defense Intelligence Agency and the Department of the Army. He is the author of many publications dealing with military and law enforcement issues.*

Logistic Support and Insurgency

Guerrilla Sustainment and Applied Lessons of Soviet Insurgent Warfare: Why It Should Still Be Studied

Graham H. Turbiville, Jr.

Abstract. *Dr. Turbiville addresses the major components of insurgent logistic support and sustainment today and discusses the enduring value to US special operations personnel of studying the often analogous experience of Soviet World War II partisan and postwar guerrilla support. Turbiville argues that contemporary requirements—such as local and external resources; supply networks, bases and caches; logistic cadre and infrastructure development; transportation; concealment and deception; fabrication of mines and explosive devices; support for phased guerrilla movement growth, and others—were reflected throughout the World War II partisan warfare and in the postwar period were organized, synthesized, and incorporated into security and military training courses and concepts for application in Third World insurgent support. Turbiville illustrates his argument with contemporary and historical examples, and—noting that Russian special operations forces study the synthesized experience in seeking approaches for Chechen and other insurgencies—judges that the extensive and increasingly accessible material associated with this "classic" guerrilla warfare experience has utility for US specialists as well.*

Introduction

At the beginning of the 1970s, the isolation and defeat—or sustainment and success—of insurgencies in a number of Latin American, African and Asian countries preoccupied selected US and Soviet planners. The Soviet organization charged principally with the support of insurgent or terrorist groups was the First Main Directorate of the Committee of State Security (KGB), which had a clear mission: create "the conditions for the use…of separate centers of the anti-imperialist movement and the guerrilla struggle on the territory of foreign countries." The First Main Directorate was also specifically charged with a challenge upon which success of that mission depended: it must through "special tasks" deliver "help by arms, instructors etc. to the leadership of fraternal communist parties, progressive groups and organizations that wage an armed struggle in circumstances of isolation from the outside world."[1] This *logistic support* dimension of insurgency was the beneficiary of a body of wartime experience and subsequent study that shaped guerrilla support in ways that still echo in the support activities of contempo-

rary guerrilla and terrorist groups. Before addressing this, however, the topic of logistics and what it means for guerrilla and terrorist group support today deserves a few words.

Military logistic complexities and approaches have in the technical sense been the object of as focused and developed attention as any dimension of military art and science. The US and a number of foreign military establishments have applied these approaches in innovative ways to create the conditions for overall military success across the spectrum of conflict. Nevertheless, while every serious specialist acknowledges the critical importance of effective logistic support, it has not been treated in general military literature to the same extent or depth as other dimensions of tactics, operational art and strategy of which it is an integral part. With some notable exceptions, synthesizing and articulating the challenges and solutions of ammunition and POL consumption, supply rates, loading and transport requirements, and other support challenges have fallen mainly to professional logisticians whose works have been read and studied by their specialist colleagues.[2]

One of the more important English-language exceptions to the dearth of broad analytical logistic works—overcoming the designations of "mind-numbing" or "boring" that general military audiences sometimes have used to characterize logistic writings—is military historian Martin Van Crevald's excellent 1977 treatment, *Supplying War: Logistics From Wallenstein to Patton*. It is deservedly used in staff colleges and advanced warfighting seminars around the world. His treatment of many aspects of logistic support as they evolved over some 150 years has sparked discussion and argument. However, with an emphasis on regular military establishments, there is scarcely a mention of the special supply and sustainment issues associated with small wars or irregular forces.[3] This is the case similarly for the later volume of essays *Feeding Mars: Logistics in Western Warfare from the Middle Ages to the Present* and for other analogous and well-researched works as well.[4] The study that systematically addresses guerrilla sustainment in the same way that Van Crevald and a few others have treated military logistics for regular armies has yet to be written, but the topic has gained far more urgency with the end of the Cold War and the new importance and even centrality of irregular warfare.

The issues and assessments of insurgent logistics—and the sustainment of large terrorist groups which shares common elements—are worth addressing before turning to the main topic of this paper: the ways in which Soviet World War II guerrilla warfare (*partizanskaya voyna* in Russian) warfare experience was studied and applied

to postwar insurgent support around the world and its continuing value in understanding centralized and decentralized guerrilla support.[5] The fact that guerrilla operations and special operations were joined at the hip historically and later increases the value of their study and understanding as a "classic" of military experience with continuing relevance.

Analyzing Insurgent Logistics

Assessing the logistic organization, requirements, practices, and capabilities associated with today's insurgencies and those in the recent past presents some special challenges. This is, in part, because assessing the support of insurgent or large terrorist groups constitutes both the logistics assessment dimension and the intelligence problem of learning in some detail what complex practices, techniques, and associations the guerrillas are trying to conceal. Nevertheless, there is a rich and growing body of material addressing key dimensions of the historic, contemporary, and postulated future trends of insurgent logistic support that is proving useful in today's global operational environment. This material includes (1) focused, historic case studies of specific historic conflicts including their logistic components, (2) a few classics of insurgency writing that tend to consider sustainment in more theoretical terms, (3) detailed looks by Western or foreign analysts at specific logistic or support functions for the most recent and on-going guerrilla or terrorist conflicts, and (4) the occasional acquisition and public availability of logistic instructional and planning materials prepared by active insurgent or terrorist groups.

(1) Historic insurgencies, successful and unsuccessful, have continuing importance for contemporary students and analysts. The fine assessment by historian Charles R. Shrader dealing with logistics in the Greek Civil War (1945-49) among his other works on logistics and regional conflicts is particularly notable.[6] Shrader's work—based on a conflict now six decades in the past—has proven itself of substantial use and interest to intelligence community analysts and others engaged in asymmetric warfare assessments and how guerrillas sustain, or don't sustain, themselves. Shrader's judgment that "if one were forced to select a single explanation for the defeat of the GDA [the Communist Greek Democratic Army] it would have to be *inadequate logistics*" (emphasis in original) is backed up by a wealth of original sources and detail. In particular, his views on the GDA's failure to establish adequate logistic infrastructure before transitioning to conventional warfare—at the very time outside support was waning—is instructive.[7]

The many insurgencies and sustained terrorist campaigns in the second half of the 20th Century retain relevance. Notably, the logistics chapter in the joint effort Jose Angel Moroni Bracamonte and David E. Spencer (*Strategy and Tactics of the Salvadoran FMLN Guerrillas: Last Battle of the Cold War, Blueprint for Future Conflicts*) addresses the well-organized structure and operation of the logistics establishment of the FMLN (Farabundo Marti National Liberation Front) and its associated groups including the extensive external support from Nicaragua (of mixed manufacture, but originally from Cuban, Soviet stocks and resources); land, sea, and air transport infiltration routes; supply depot and cache distribution system; and medical support provided by outside humanitarian groups including drugs, surgical equipment, and doctors.[8] Reiterating what essentially every specialist has determined about the logistic component of insurgencies, the authors conclude that, "One of the great accomplishments of the FMLN and the forces that supported it was that of setting up a sound logistical foundation … one of the key reasons the FMLN was able to last over twelve years of bitter conflict." [9]

(2) Military classics of insurgency continue to inform specialists—at least in theoretical terms—of the importance of existing or acquired strong popular support as a prerequisite for success. Relatively brief and general treatments of sustainment in classic works on insurgency—Mao Tse-Tung, Vo Nguyen Giap, Ernesto "Che" Guevara, and Brazilian Communist Carlos Marighella—are typically more theoretical in their insight than in practical application. A reading of Che's Bolivian diary, for example, certainly underscores the consequences of limited material and other support infrastructure.[10] Marighella's influential formulations in *Mini-Manual of the Urban Guerrilla*, a work distilling and organizing the experience of the Brazil's Acao Libertadora Nacional (ALN) insurgency and distributed worldwide by Cuba from 1970 on, treated guerrilla logistics succinctly but in a way almost redolent of a western army field manual passage.[11] He drew a distinction between conventional military sustainment and the "revolutionary logistics" of fragmented guerrilla forces, using the formulation MMWAE for *M*echanization (transport), *M*oney, *W*eapons, *A*mmunition, and *E*xplosives to set out basic insurgent needs. He lays out a requirement for phased growth to include expropriating and capturing military resources, robbing banks for financing, caching, transporting, and distributing materiel by making use of superior knowledge of the environment. The mixed results and failures of *Mini-Manual* users as diverse as the Uruguayan Tupamoros, Provisional Irish Republican Army, Baader-Meinhoff Group, Italian Red Brigades, German Red Army Faction and others, makes its practical

value problematic, but it constitutes an unusually focused theoretical construct for insurgent logistics.

(3) Recent assessments of specific aspects of insurgent and terrorist sustainment and support have proliferated in the wake of 9/11. The Rand Corporation has in particular examined in a scholarly way many of the dimensions of contemporary insurgent or terrorist group sustainment. Of special note, Rand Corporation analysts in *Trends in Outside Support of Insurgent Movements (1991-2000)* reviewed some 74 insurgencies and the kind of external support they received. The study addresses safe havens, financial support, political backing, and direct military assistance, and in doing so considered support from states, diasporas, refugees, and other non-state actors. Valuable looks at specific contemporary issues like the intricacies of al-Qaeda financing,[12] arms trafficking sources and routes for Colombia's Revolutionary Armed Forces of Colombia (FARC) and National Liberation Army (ELN),[13] and how terrorist/insurgent groups learn, to include incorporating logistic lessons and developing more effective support approaches and techniques.[14]

The latter, for example, described institutional learning aspects of Lebanon's Hizballah financial and arms support from Syria and Iran, an international logistics infrastructure for weapons trafficking and fund-raising, and local support initiatives to promote recruiting; Japanese Aum Shinrikyo terrorist group's acquired sophistication within the international trading environment while taking advantage of its "religious" status; Southeast Asia's al-Qaeda-linked Jemaah Islamiyah group with a relatively rudimentary logistic base; and the extensive and evolved Provisional Irish Republican Army logistic infrastructure to include particularly the sophisticated financial and criminal revenue-generating activities.[15]

(4) The most insightful materials are the internal records and documents of guerrilla or terrorist groups, some of which are quite developed. While document exploitation of recovered or captured materials dealing with contemporary guerrilla and terrorist group logistics falls mainly to the intelligence community and results are usually not publicly available, some seminal materials are released or becoming available.

For example, an event in the spring of 1993 highlighted a dimension of developing terrorist and insurgent logistic support that was more complex than many imagined. A series of pre-dawn explosions on 23 May destroyed an automotive garage in the Santa Rosa area of Managua, Nicaragua. Responders found a well-developed, multi-chambered underground storage facility beneath the garage that soon was popularly referred to as the "Taller Santa Rosa Arse-

nal."[16] The underground facility had hydraulic doors, and its various chambers, connected by tunnels, held some 307 passports from 22 countries, various national immigration stamps, other false documents, and assorted permits to include blank voter identification cards for the upcoming 1994 election in El Salvador. It also held approximately 7,000 pages of documents including well-developed target data on companies and individuals, strategy papers, clippings on actions, and other material, hundreds of AK-47s, machine guns, RPGs (rocket propelled grenades), and tons of ammunition and explosives including C-4 plastique; and 19 surface-to-air shoulder fired missiles.

The documents and investigation revealed that the proprietor of the garage and underground storage facility was a leader of the ETA Basque terrorist international logistic apparatus (who later became overall ETA logistics chief). His Basque partner also was an ETA logistic apparatus member. In addition to ETA, documents revealed that interacting organizations included the FPL (Forces of Popular Liberation) of the multi-group FMLN (which later admitted ownership of the weapons), the MIR (Movement of the Revolutionary Left, based in Chile); Sandinista elements (then very much a part of the military and internal security components of the Chamorro Government), and the ERP (Peoples Revolutionary Army in Argentina). The logistic and other links among these disparate groups highlighted relationships and cooperation that gave additional insight to sometimes intertwined support.

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Similarly, some FARC and ELN resourcing and financing—and particularly the criminal linkages at a time when it was debated—appeared in the early 1990s. The arrest of the ELN finance minister in north central Colombia in early 1992 reportedly was accompanied by the discovery of a computer disc that set out a wealth of ELN money-making operations throughout northeastern Colombia—operations that included a list of ransom payments and victims, extortion schemes involving businesses and individuals, and an assessment of guerrilla front expenses. It also included Colombian intercepts of FARC secretariat mail, seized documents, and debriefed a number of defectors and collaborators. All of this revealed an extraordinary amount of information on FARC and ELN financing, and indicated—already more than a decade ago now—that the two guerrilla groups had become the "largest, best organized, and most profitable criminal activity in the country." Further, the Colombian authorities de-

termined a close correlation between the deployment of the various guerrilla fronts and the centers of economic enterprise of one form or another, especially oil, gold, coal, bananas, coca, and, most recently, poppies. Guerrilla deployment shifted to these areas where revenues were greater. Guerrillas reportedly have even helped revive cattle ranches when their excessive expropriation of money caused ranches to become of marginal financial value.[17]

Al-Qaeda—an organization with demonstrated learning capabilities, whose writings make Marighella's *Mini-manual* look very spare—has set out logistic approaches, as fragmentary information from recovered documents indicates. Much of this, judging from media reporting, is not available publicly. But one document illustrates the approach and level of detail. This is a manual that has among it chapters an al-Qaeda security plan for all phases of arms acquisition. Discussed, for example, are phased measures that address:

- 1st Stage-Prior to Purchase: perform surveillance detection exercise, wear appropriate clothes, prepare cover story, etc.
- 2nd Stage-Purchasing: minimize time with seller, view, inspect, test arms, be alert for unnatural behavior, etc.
- 3rd Stage-Transport: Deploy observers ahead of arms transfer, pay attention to time and routes, pay attention to proper vehicle registry and running condition, etc.
- 4th Stage-Storage: select arsenal site (with view to its history, location, observation), keep comprehensive coded & secure records, have alternative arsenal sites, don't visit frequently or "toy" with weapons, etc. (a stricture evidently ignored at the Managua arsenal explosion.)"[18]

Collectively, the selected treatments of insurgent and terrorist group logistic approaches and techniques above identify and highlight elements that historically and today are essential for the sustainment of armed groups of all types. They vary in detail, emphasis and how well they have been applied in their particular historical or operational circumstances. Synthesized, however, they highlight the following key elements of guerrilla sustainment that require continuing study and understanding:

- Local and external support dimensions
- Supply networks, bases and caches
- Logistic cadre and infrastructure development
- Transportation
- Concealment and deception
- Fabrication of mines and explosive devices

- Technology applications
- Rural, urban and maritime aspects
- Administering guerrilla support and operational areas
- Interaction with external groups
- Printing and disseminating directives, training, and propaganda materials
- Financial and money-raising approaches and techniques
- Logistic support for phased guerrilla movement growth into a near-regular or conventional force

This paper addresses additional "classic" experience that speaks to all of the elements above—that is pertinent components of the extensive and variegated experience of the Soviet guerrilla logistic support in World War II, and how the experience was studied and synthesized by postwar military planners who applied the lessons to insurgent support throughout the 1960s, 1970s, and 1980s. There are many strong echoes of this that continue in groups with a heritage of Soviet/Warsaw Pact/Cuban support and extensive training, and perhaps in Russian gray market activity among old clients as well. Articles, studies and assessments constitute a superb collection of tactics, techniques, and procedures, theory, observations, lessons and countermeasures applicable to insurgent logistic support—and which have penetrated practice and language of many groups. It is worth revisiting and reconsidering for its still-relevant lessons in the logistic support of irregular armed groups. While studied in the West with considerable attention in the years after World War II and in the US-Vietnam War period, this rich body of material—and newly developed and interpreted material—has been largely neglected amid the renewed interest in insurgency.

This paper will examine how planners collected and systematized insurgent logistic concepts, experience and techniques to include different types of insurgencies and environments; identified and highlighted guerrilla actions and successful/unsuccessful countermeasures, and considered their pertinence for the support of insurgencies in the last part of the 20th Century.

Guerrillas and Logistics: Soviet Partisans and Postwar Applications

The USSR emerged from war with a legacy of guerrilla operations—and their logistic support—which like many aspect of the war on the East Front are staggering in their statistical dimension. Planners and historians after the war carefully categorized the 1941-45 "Partisan Movement" in terms of guerrilla groups, detachments and units formed; the number of enemy troops, vehicles and facilities de-

stroyed; the types and quantities of supplies provided; and countless other details. German intelligence throughout the war did the same thing.[19] Soviet and Russian historians claim that more than one million guerrillas, supported by hundreds of thousands of underground workers, killed, wounded or captured some 1 million Germans and their allies over the course of the war destroyed over 4,000 tanks and armored vehicles, planted explosives that destroyed 1,600 railroad bridges, and wrecked more than 20,000 trains.[20] Sometimes operating in small isolated groups, or progressively larger units under central control that approached the capacity of regular units, these forces ambushed enemy forces, cut supply lines, raided facilities, disrupted enemy efforts to establish administration of occupied areas, executed collaborators, engaged in targeted assassination actions, and gathered intelligence for local use and higher military or security service commands. One of the most important reasons that this still matters is that the materials, archives, and direct personal experience coming out of World War II constituted the base upon which Soviet and Russian guerilla operations and support approaches and techniques were developed over the next six decades.[21]

Refocusing Guerrilla Warfare Experience

There is a chain of knowledge, application, and legacy from World War II partisans to contemporary guerrillas that bears brief review. One of the most important figures associated with the success of guerrilla forces in the field against the Germans—and overall in the history of Soviet special operations forces—was Il'ya G. Starinov, a man little known in the USSR and elsewhere until the 1980s saw the increased appearance of World War II memoir materials and other writings.[22] He died in 2000 at the age of 100, providing council and ideas on guerrilla and counterinsurgent warfare almost until the end, and his contributions to the most carefully protected Soviet military and security service operations in World War II and Cold War are still being revealed. Based on his organizational and operational endeavors as a Soviet unconventional warfare operative in the Spanish Civil War and Finland, as a special operations commander, trainer and innovator throughout World War II, and as a postwar professor/advocate for guerrilla warfare and special operations, Starinov is recognized as one of the most influential contributors to both intelligence/security service (Soviet Committee for State Security–KGB–and Russian Federal Security Service–FSB) "Alfa and "Vympel" special units, and military intelligence (GRU) special operations forces. More specifically, the Russian-designated "grandfather of special operations" is known a master of sabotage-diversionary operations in rear areas as carried out by guerrillas and special operations units.[23]

His name and training techniques remain closely associated with the innovative extensive use of concealed, remotely-detonated and timed mines and explosive devices against enemy forces and facilities—an effort that embraced the often impressive technological innovations of the time. He entitled his first memoir *Mines Await Their Own Hour*, and his insistence that a "mine is not a defensive, but especially offensive weapon" has defined trained approaches in postwar special operations schools to the present day. One former special operator described being introduced to Starinov's work at Ryazan Airborne facility in the 1980s, where special forces were trained under the cover of other airborne training:

> The first time I was introduced to his name, I was being trained in the Department of Special Forces GRU GSH [Main Intelligence Directorate of the General Staff] of Ryazan Airborne Command School in 1981-1985 (then the Special Forces Department at Ryazan) which was so secret that its existence was not even known to many military leaders. The mine-explosive topic was thoroughly studied in the department as one of the basic subjects. Basic teaching aids and manuals on the mine-blasting matter were developed with the direct participation of Starinov.[24]

As late as the mid-1990s, Colonel Starinov advocated, from retirement, a plan for the offensive use of an elaborate mine/explosive ambush of Chechen field commanders Shamil Basayev and Khattab (the latter eventually killed by Russian special forces). He cited the successful 1941 remotely-detonated, radio-controlled mine assassination of the German Kharkov Commandant, Lieutenant General Geog von Braun, and the staff of the 68th Infantry Division, an action that stunned the Germans with the unexpected sophistication of the mine and planning.[25] Unfortunately for the Russians, Chechen guerrillas—many of them trained in Russian and Soviet military schools—use this kind of approach more effectively against Russian field forces and commanders as well as Chechen government leaders and forces. More recently yet in August 2005, whether one agrees with the judgment or not, Russian specialists link GRU Spetsnaz effectiveness with the guerrilla lessons of World War II:

> Afghanistan alone showed that GRU Spetsnaz brigades were the most effective subunits in fighting mobile mujahedin detachments. Certainly this was explained by the fact that the methodology of training the Soviet Spetsnaz absorbed the best experience of Great Patriotic War partisans. Judging from everything, it turned out that our 'partisans' were enormously tougher than those being trained with CIA money.[26]

Starinov's experiences and innovations are instructive for a wide range of guerrilla and special operations, but it is a postwar research and application effort he instituted that had direct impact on insurgent logistics. After the end of the war, in 1948, Starinov created the *Organization and the Tactics of Partisan Warfare* group within the Military Institute of the Ministry of Internal Affairs (MVD). He ran the group jointly with the Chief of the Rear Service Department. The group was tasked to conduct in-depth studies of guerrilla warfare, and according to Starinov soon recruited dozens of research and operator "enthusiasts" who would continue this work for decades.[27]

One of the early members to join the Organization and the Tactics of Partisan Warfare group was the young officer Vladimir Nikolayevich Andrianov. In the shuffle of Soviet security forces he soon wound up in the Academy of the KGB, creating the advanced officer courses and curriculum which trained hundreds of KGB specialists over two generations. These courses are credited as a foundation of the former Soviet and current Russian Alfa and Vympel spetsnaz units of the FSB. Officers and KGB centers also trained countless East European allies and Third World guerrilla and terrorist group cadre, drawing on the synthesized lessons of World War II partisans and growing postwar experience. While much of Andrianov's work was clearly classified, a series of open source treatments referenced below has given considerable insight and detail into lessons learned and taught.

Another of the "enthusiasts" recruited by Starinov at the same time and linking World War II guerrillas and special operations to the post war period, was the then-young KGB officer Grigoriy Ivanovich Boyarinov. A chief of the long-secret Balashika special operations training center where generations of Russian and foreign specialists (including young Palestinian terrorist Yasser Arafat) learned their skills, he was killed two decades later in Kabul by friendly fire while leading the KGB Vympel assault force that captured/killed Afghan President Amin in the early hours of the December 1979 Soviet invasion.[28] Peter Nishchev, later chief of the KGB special counterterrorist training courses from 1981-1984, joined the group at this time. He was still providing expert commentary on the Chechen guerrilla takeover of the Beslan school where so many children, civilians and Russian special operations personnel were killed.[29] As noted above, these men, training facilities and courses, and activities were associated with the First Main Directorate of the KGB—responsible for foreign intelligence.

Supporting Guerrillas at the Height of Soviet Power

There is no need to recount well-documented Soviet support of Third World guerrillas and terrorist groups. But it's worth briefly recalling where Soviet initiatives—informed by synthesized guerrilla lessons and techniques adjusted by new experiences—had taken them on the eve of the USSR's descent into dissolution. In mid-1980s, the Soviet potential for influencing the course of regional conflicts through direct or indirect military assistance *appeared* greater than at any point in the past. Soviet military assistance programs—to include the capability to provide advisers, arms, other equipment, and supplies at levels ranging from small-scale covert actions in behalf of guerrilla and terrorist groups to the massive, surge support of clients engaged in high intensity local wars and wars of national liberation—had been implemented on numerous occasions since the mid-1950s.[30] Later, KGB-run or sponsored training camps in the USSR, Warsaw Pact countries, and in Cuba among a number of other countries turned out hundreds of guerrilla and terrorist cadres. The support of large numbers of Cuban surrogate forces in the 1970s and destabilizing support of insurgent and terrorist activity around the world seemed to constitute a well-developed tool to obtain favorable resolutions in local wars and military conflicts in the future. The substantial Soviet capability to provide arms, equipment, supplies, and associated Soviet or surrogate advisors constituted the most frequent means of shaping the course of military actions in low intensity conflict.

US assessments of Soviet military support to Third World client states in 1987 took note of what seemed to be an increasing pace of arms aid and other military assistance to selected countries, together with growing air and maritime transport means for the long-distance movement of materiel and troops.[31] In 1987 alone, the USSR provided some 21-billion dollars to more than 30 states, including record deliveries of arms to Nicaragua for the purpose of "underwriting Managua's military supremacy in Central America."[32] The US judged that the Soviet Union maintained more military advisors in Latin America and Africa than the US had globally. These included 3,600-4,000 in Sub-Saharan Africa, 8-9,000 in the Middle East and North Africa, 3,500 in Asia, and 7,900 in Latin America including Cuba.[33]

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The faltering of the Soviet bloc in the late 1980s under Soviet President Mikhail Gorbachev and the eventual dissolution of the USSR in 1991 changed things fundamentally for the resources and training of guerrillas. But it left a legacy of arms, thousands of So-

viet/Soviet bloc/Cuban-trained foreign cadres, remnants at least of ideology, and a wealth of tradecraft, tactics, techniques and procedures that continue to shape guerrilla sustainment. This being the case, an examination of covert or clandestine materiel-technical support in Soviet historical precedent and how the Soviets studied and applied this historical experience point to its continuing relevance.

Historical Experience and Contemporary Experience

In 1975, with the publication of an important two-part article by the then-Chief of the Voroshilov General Staff Academy, Army General I. E. Shavrov, the Soviet military periodical *Military-Historical Journal* began a systematic open examination of a number of local and national liberation war issues that earlier had been addressed less frequently in open Soviet writings.[34] It reflected a Soviet practice, typically paralleling classified research, in which especially important or pressing military issues were discussed in "historical" or otherwise less sensitive terms. Subsequent issues of the journal typically included one or more articles addressing various aspects of the theory and practice of local wars and military conflicts, with other military (and non-military) journals and monographs beginning to address a broad spectrum of such issues as well. As noted, this effort was preceded and paralleled by more detailed classified assessments, some of which appeared in the formerly restricted General Staff journal *Military Thought*.[35]

Another indication of the growing extent of Soviet research interest in studying and assessing the lessons of local wars and military conflicts became apparent in the spring of 1981. At that time, military historian Lieutenant General N. M. Kir'ian signed off on a list of approved topics of military-historical research for the 1981-1991 period.[36] Included among the more than 200 recommended topics—which in total reflected virtually every key area of contemporary Soviet military interest—were numerous research themes dealing with the conduct of local wars and the military affairs of developing countries.[37]

The long-standing Soviet interest in studying the development of the guerrilla movement in World War II described earlier also gained more public visibility in the 1970s and 1980s, as did the experience of special operations forces of various types.[38] This effort incorporated the interaction of special operations forces with guerrilla groups, and the cooperation of both with regular formations and foreign military forces. Of particular note in these assessments was the explicit identification of the Soviet guerrilla experience as a model for contemporary efforts to determine how best to support insurgencies and

revolutionary movements, to include what constitutes appropriate levels of logistic support of all types.

The most prolific and insightful author, in this regard, was the aforementioned Major General Viktor N. Andrianov, who wrote extensively on various aspects of the partisan movement for at least four decades. While he joined the Organization and the Tactics of Partisan Warfare group in the late 1940s, Andrianov's first known public assessment of guerrilla warfare issues appeared in 1961 when he was a major, with his most recent article (as a major general) appearing in 1988.[39] In 1984, Andrianov discussed how the Soviet guerrilla movement in various parts off the USSR differed in composition, equipment, and tactics, depending upon the geography of the region, enemy strength, local and outside materiel-technical (i.e., logistic) support available, population density, potential for operating with regular armed forces, and other issues.[40]

He described the necessity for partisan units to begin with small detachment-size elements, which over the course of the war grew to battalion, brigade, and then formation size. Careful attention was given initially to "supplying the partisans with weapons which would make it possible to destroy enemy personnel and equipment without directly engaging them in armed combat."[41] By the end of the war, partisan unit consolidation and appropriate improvements in their technical equipping brought "partisan forces closer to the structure of troop formations," and even allowed partisan forces to cross state borders and operate "successfully in neighboring countries, providing aid to the local antifascist forces fighting the occupiers."[42]

Andrianov summed up the guerrilla experience and its contemporary relevance to local wars and conflicts by observing that, "from the examples of the development of national liberation wars over recent decades, one can see that as the struggle developed and its organization improved, the partisan forces grew into people's liberation regular armies, which organized themselves along army lines, although they continued to operate in the enemy rear and employ partisan warfare methods."[43] Andrianov and other KGB or military theorists and planners examined in some detail the equipping and resupply of partisan units, the transport means used to disseminate supplies, the use of airdrops and gliders for the clandestine delivery of troops and materiel, the establishment of supply caches, medical support and evacuation techniques, the use and distribution of captured equipment, and many other associated issues.

Similarly, the logistic support of special operations detachments—an effort often associated with the shared experience of guerrilla resupply efforts—was addressed in these public studies as

well. These special operations detachments frequently operated with guerrillas or used partisan bases as staging areas for the accomplishment of their assigned missions. There are clear analogies between the use of highly trained special operations personnel to train, assist, or augment partisan forces in World War II and the use of Soviet or surrogate advisors dispatched to perform similar functions with contemporary Third World military establishments or insurgent movements. Today, in a far different environment, the use of foreign cadre to train Islamic terrorists or insurgents suggests analogous interaction.

Those assessments of pertinent historical experiences, planners then and now insist, "enriched" both theoretically and practically that now-substantial body of postwar experience in supporting local wars or military conflicts in the Third World. There were many echoes of this carefully studied historical experience in modern approaches to logistic and associated support in unconventional operations, both in terms of technique, organizational responsibility, and even equipment. Some of the more important examples of this extensive Soviet experience is briefly examined below.

Supplying Unconventional Warfare Forces in World War II

The organizational and combat employment dimensions of guerrilla operations were covered in detail by KGB and other specialists tasked to do this work. Increased open attention to the sustainment of guerrilla forces, however, had evidently been a neglect not only by Western specialists, but by Soviet analysis as well. In the case of the logistic support of the large, diverse, and complex Soviet guerrilla movement in World War II, this oversight had obscured what is a remarkable achievement in organization, ingenuity, and accomplishment that remains of contemporary relevance. Whatever the extent to which planners were satisfied with classified work, one Soviet author noted in 1973 that "the experience of supplying partisans … has yet to be sufficiently studied and reflected in historical literature."[44] The imperative to do more open work, expressed in the actions described above, resulted in enough materials available to both make generalizations and provide some concrete examples.

Infrastructure and Fieldcraft for Sustainment

There were three basic sources of supply for guerrilla detachments and formations during the course of the war, whose importance and contribution changed as the partisan movement evolved and the operational situation shaped guerrilla roles, employment approaches, and opportunities and limitations overall.[45] These included (1) the

utilization of local resources obtained from propositioned caches or depots, recovered from battlefields and acquired from the populace, and manufactured in limited, and sometimes well-developed, guerrilla production facilities; (2) materiel and supplies captured or otherwise obtained from the Germans or their allies; and (3) the broad range of support provided to the guerrillas from outside their operational areas by military and other means.[46]

In July 2005, Moscow construction workers building a new facility near the Kremlin found a carefully concealed cache of some 600 pounds of TNT under the old Moskva Hotel. The neat squares of pressed TNT—like those supplied to Soviet guerrillas throughout World War II—had been planted by the NKVD "Special Tasks" directorate, which was responsible for operations in enemy rear areas and occupied territories. The newly discovered TNT was one of countless arms caches established in territory subject to occupation. In October 1941 it appeared Moscow itself might be overrun and occupied by the Germans, a fear that was nearly realized. In this case, according to the still surviving son of an NKVD officer who helped plant them, the TNT blocks had a special purpose: they were to be detonated upon the anticipated arrival in Moscow of German propaganda minister[47] Joseph Goebbels, who reportedly planned to inaugurate a headquarters there with a view of the Kremlin. It was a recent reminder of the extensive preparations made for pre-positioning materiel and supplying guerrillas with requisite explosives and arms.

Moscow construction workers building a new facility near the Kremlin found a carefully concealed cache of some 600 pounds of TNT …

During the war, caches and depots established before the war began and by retreating Red Army units and security forces after the German attack, served in part to supply the initial guerrilla groups with arms, explosives, and other materiel.[48] However, a number of these stockpiles were discovered and destroyed by the rapidly advancing Germans, others were mal-positioned for subsequent partisan use, and the location or existence of still others (like the recently discovered Moscow cache) were simply forgotten or not passed on in the confusion of the first months of the war.[49] This early experience with clandestine supply bases influenced what, by the end of the war, had become virtually an art form in creating, concealing, and using bases and depots. As the guerrilla movement grew and became better organized, sophisticated base complexes were established in guerrilla operating areas.

Andrianov and others have described in some detail the base system that became more and more developed. These bases were classified as main, reserve, and decoy or dummy (*lozhnyi*) facilities. The main base, as implied by its designation, constituted the principal concentration of weapons, ammunition, food, and other supplies, together with shelter and other living facilities, and was located within the guerrilla units' usual deployment area.[50] Reserve bases were intended to support a guerrilla formation that was required to redeploy from its usual area. They were set up in extreme secrecy, their locations known only to a few individuals in the guerrilla formation.[51] Dummy bases, often set up in main guerrilla deployment areas as well as in some proximity to reserve areas, were intended to deceive or divert enemy counterinsurgency efforts in much the same way that rear service *maskirovka* efforts (comprising a complex of camouflage, concealment, and deception measures) were used with the regular field forces. The guerrillas sometimes simulated radio communication centers in connection with the dummy bases.[52] German counterintelligence put major emphasis on locating guerrilla bases and depots, an effort that drew upon the reports of informers and captured guerrillas, as well as the careful monitoring of movement and activity by the local populace among other measures.[53] As a consequence of such actions, guerrilla bases were discovered and destroyed on a number of occasions, though skillful concealment measures enjoyed substantial overall effectiveness.[54]

In addition to main, reserve, and dummy facilities, temporary bases were also set up, usually by raiding detachments operating out of area, or to support a guerrilla operation in a defined zone of action.[55] For all bases and depots, engineer preparations received close attention. As guerrilla forces grew in size and the levels of technical equipping, and as resupply from outside sources came to play a greater role, the engineer preparation of partisan bases became more extensive. For example, the criteria for locating a guerrilla main base included the potential for overhead and ground concealment, secure ingress and egress routes, availability of water and fuel, and potential for defense among other factors.

The base itself could vary substantially and might, for example, consist of mud huts or dugouts, each with at least two exits, arranged in a circular pattern for all-around defense and linked by communications trenches. The accommodations would be organized to maintain the integrity of guerrilla components and detachments should they have to defend the location against surprise attack. Elaborate systems of sentries and trail watchers were established, along with various kinds of signal devices. Mines, other explosive devices, and

non-explosive obstacles were set up on the approaches to the base and within it. Underground storage caches and depots would be dispersed in the surrounding area, and airfields or drop zones at safe distances from bases were set up as well.[56]

There were many variations in guerrilla base or depot structure, size, and associated operating measures, a factor that increases the value of this experience for contemporary applications in a variety of environments. For example, in 1943, the Germans discovered two large depots in a marshy area of the Khletnevski Forest west of Bryansk (about 200 miles southwest of Moscow). The depots were built on a small island in the marsh, and were linked to the bank by a sixty-meter-long sunken bridge, made of logs, and about a half-meter under water, a discovery presaging general Vo Nguyen Giap's use of underwater "logistic" bridges to transport ammunition, other supplies and people a decade later in Indochina.[57] The bases, caches, and depots from the northernmost areas of partisan activity to the southern USSR all had their distinctive characteristics and a variety applicable to many kinds of geographic regions and operational circumstances.

The acquisition of food from the countryside was not initially a problem in many guerrilla areas, because of its ready availability from former collective and state farms.[58] However, as the German occupation intensified, and agricultural production diminished, this source of supply was no longer available. This necessitated a regularized program of acquiring food and clothing from the local populace, an effort accompanied by intense indoctrination and propaganda activity designed to emphasize the local residents' duty in supporting the Russian guerrilla groups.[59] However, persuasion, coercion, and appropriation were also used by the guerrillas in what were generally successful, if mixed, efforts to meet food and clothing needs.

While weapons and other materiel were initially procured from former battlefields, this resource, too, soon lost its potential as the German occupation took hold. As a consequence, the guerrillas themselves began to produce and repair a variety of clothing and equipment items. The output of this effort, carried out with limited resources, could be extraordinary. In some cases, surplus items were even provided to the local population, and the repair of small arms and other light infantry weapons became an important factor in maintaining guerilla detachment firepower.

Of particular importance to the guerrillas, however, was the manufacture of explosive devices and mines in their own workshops. Guerrillas dismantled recovered bombs and artillery shells to produce their own sabotage devices. This extensive and innovative ef-

fort is worth studying in detail, since the devices for the time were extraordinary in their effects and were continually adapted to German countermeasures. Among the innovations produced in guerrilla field workshops was a cheap, portable, delayed action electromechanical fuse that could be set with a delay from 2 hours to 100 days. This single innovation was critically important. As one specialist noted, "this fuse … literally opened an era in the matter of mining roads and facilities during a withdrawal, and has a tremendous significance in any sabotage matter."[60]

Among the innovations produced in guerrilla field workshops was a cheap, portable, delayed action electromechanical fuse …

The partisan leadership had made a conscious decision to concentrate on the supply and fabrication of demolitions as a primary guerrilla weapon. The reason for this was the relative guerrilla weakness in mechanization and mobility, the difficulty in communicating or blocking German communications and reaction, and the overall guerrilla weakness in relative firepower, especially in the early months of the war. Explosive devices, as retrospective analyses put it, enabled the guerrillas to strike blows of tactical, operational, and sometimes strategic importance against a superior enemy without the dangers of direct contact—this shaped the supply priority, research for new technologies, and employment practices. As noted earlier, Starinov's writings alone provide a wealth of information on theoretical and practical approach that continued to be developed throughout the Cold War under KGB and GRU auspices.

Materiel captured or otherwise obtained from the Germans and their allies played an important role in supplying guerrilla formations throughout much of the war. Postwar statistical retrospectives indicate that this was the second major source of weapons and ammunition, following external resupply.[61] (The 1980s calculated decision by the Salvadoran FMLN and its Soviet/Cuban/Nicaraguan sponsors to falsely insist that local supply was the main source of their weapons was noted earlier. The reality that outside supplies eventually become critical for growing or sustained guerrilla movements, however, remained operative four decades later.)

To illustrate local acquisition, during 1942 alone guerrillas in the Mogilev area (in current Belorus, some 100 miles east of Minsk) captured 8 field guns, 195 light and medium machine guns, 155 submachine guns, 2,659 rifles, 1,999 pistols, 442,000 rounds of ammunition, and 1,256 grenades.[62] Some assessments by the Germans indicate that attacks on supply depots to obtain arms were infrequent, though they clearly took place more often later in the war,

and when guerrilla formations were of sufficient strength.[63] Provisions were also obtained from German depots by German-speaking and German-uniformed guerrillas, with arms also purchased from enemy soldiers (usually non-Germans) by the local population in behalf of the guerrillas.[64] Sometime a ruse was used to obtain supplies from German resources. A postwar account prepared from German sources recounted the following:

> ...it was established that in one particular area guerrilla convoys led by German-speaking individuals in German uniforms called for provisions, and by the presentation of the regular requisition forms they managed to obtain German supplies. This was made possible by the fact that the German forces were using almost exclusively Russian personnel for their so-called *panje*-convoys (columns of native horse carts), with only a few Germans to supervise them. Thus it was relatively easy for the guerrillas to organize the same type of convoys without attracting undue attention and to disappear again as soon as their mission was accomplished.[65]

As postwar specialists insisted, this kind of experience was instructive for national liberation struggles in the postwar years, and informed in many ways the approaches used by Soviet and surrogate advisors. It was the clandestine support of partisan and special operations forces from outside resources, however, that may have the greatest parallels for Soviet support of unconventional warfare forces. This is seen in the organizational and support infrastructure established and in guerrilla resupply methods.

In the spring of 1942, the State Defense Committee established the Central Staff of the Partisan Movement in Moscow, under the Supreme High Command. Partisan headquarters were also set up under the various *front* military councils, and at the republic and region (*oblast'*) level. These headquarters and staffs controlled and/or coordinated the operations and support of partisan formations in the field.[66] Within the Central Staff of the Partisan Movement, a "materiel-technical directorate" was established to oversee the provision of supplies and technical support of all types.[67] This included in particular the use of logistic support from the central rear service organizations of the regular armed forces, those logistic assets available in the major field commands (army groups), and the production of scientific-technical organizations in Moscow. The creation of this infrastructure—with a reach that varied depending on the isolation and circumstances of guerrillas—facilitated the planned and often quite successful supply of guerrilla forces with weapons and equipment, some of which was designed especially for partisan use.

While the manner of providing materiel to the guerrillas varied, typically the Central Partisan Staff's materiel-technical directorate formulated supply requirements on the basis of requisitions from guerrilla forces in the field (frequently by radio), and requested the requisite supplies and transport from the appropriate main and central directorates of the People's Commissariat of Defense or Red Army. For example, in December 1943 the Central Partisan Staff (speaking as a direct subordinate of the Supreme High Command) passed the following requirement to the Main Military-Engineer Directorate (GIU), which was successfully fulfilled:

> The Central Staff of the Partisan Movement is conducting a special operation in the rear of the enemy to disrupt communications and against other important enemy targets. To carry out the given mission, I request the following to be allocated: 50 tons of pressed TNT, 500,000 percussion caps, 30,000 meters of bituminized hemp-covered fuses, 30,000 meters of detonating cord, 40,000 'MUV' mines.[68]

Similarly, the Main Artillery Directorate (GNU, later and still the Main Rocket and Artillery Directorate or GRAU) from July 1942 through December 1944 provided the Central Partisan Staff with 52,985 rifles, 47,987 automatic weapons, 8,398 handguns, 4,385 submachine guns, 25 medium machine guns, 2,589 antitank guns, 1,864 50-mm mortars, and other items under this main directorate's auspices.[69] Then, as now, the use of centrally-subordinated resources allowed unconventional warfare forces (or arms aid clients) to be provided with large quantities of equipment without drawing down on the operational inventories of regular forces. This effectively drew on military resources of main directorates like GAU (GRAU), GIU, the Main Tank Directorate (GBTU), and others, while maintaining special command links and centralized control outside the normal military channels. In the later stages of the war, the major field forces (army groups called *fronts*) provided equipment and supplies of all types to the partisan forces that operated along their directions of advance.[70]

This model paralleled and in a number of ways was almost precisely analogous to the later Soviet support of Third World insurgencies—the provision of weapons and materiel from central stocks to intermediate locations or directly if possible. The subsequent distribution and infiltration of resources to guerrilla groups by all means of transport was similar as well. This model has its analogous dimension today, whatever the sources of the external support.

Applying new technology or the innovative use of older approaches was a continuing focus. There was an active effort during the war

to develop equipment better-suited to unconventional operations. At least some—and quite likely all—of the larger guerrilla group staffs had engineer-technical organizations charged with this task. For example, the engineer-technical section of the Belorussian Partisan Movement Staff, working closely with scientific research institutions in Moscow and the Central Partisan Staff, facilitated the creation of several types of special partisan mines, while the Central Partisan Staff arranged for the production of a special demolition slab weighing only 7 grams, less than 20% of the weight of earlier material.[71]

Bernard Fall's famous judgment that "when a country is being subverted it is not being outfought; it is being out-administered" would have been well-appreciated by the Soviet leadership who used the variegated guerrilla movement to shape local attitudes, garner support of all types, and prepare the countryside for the eventual restoration of Soviet power.[72] As a consequence, there is a wealth of information on the approaches taken to exercise control over the local populace. This included the creation of elaborate Communist Party infrastructure embedded in guerrilla groups, the production of anti-German and pro-Soviet literature produced by printing plants provided to guerrilla units, other agitation-propaganda activities, and the assassination of German administrators in occupied territory. This effort required logistic support in terms of printing presses and supplies and cadre personnel.

The transport of men, equipment, and supplies to forces operating deep in enemy rear areas—increasingly better armed and equipped—posed a considerable challenge. In maritime areas, small boats, larger transport vessels, or submarines were employed, as was the case with the resupply of guerrillas in the Crimea by launches of the Black Sea Fleet.[73] Tradecraft developed in these different environments was substantial and incorporated into postwar retrospective assessments. On occasion, gaps in the front allowed guerrillas to he supplied by truck, animal transport, and on foot though so-called "partisan gates."[74] As both Soviet and Western assessments agree, however, the most significant contribution to guerrilla support was made by aviation.

Special Designation Aviation Support and Guerrilla Logistics

Gerhard L. Weinberg, in his fine early study of guerrilla aviation support, noted in regard to the use of aircraft that the "combination of modern technology with a primitive form of warfare enabled the Soviet High Command to fashion a military and political weapon of tremendous strength from a guerrilla movement relegated by its very name to the "little war."[75] This kind of combination of then "high

technology" in an otherwise primitive environment has characterized a number of local wars and military conflicts supported by the Soviets in the postwar period and have its analogs in other insurgencies as well. Postwar assessments also judged that the "most effective method of delivering various materiel to the area of partisan activity was aviation."[76] Soviet aviation resources used in this effort included aircraft of front aviation, Long-Range Aviation, and Civil Aviation. A total of some 109,000 missions were flown in behalf of the guerrillas during the war, with personnel and cargo air-landed, airdropped, or delivered by glider.[77]

Some aviation units played particularly active roles in guerrilla support, as was the case of the 1st Aviation-Transport Division, known until September 1942 as the "Aviation Group of Special [*Osobogo*] Designation."[78] This organization made some 1,000 flights into enemy rear areas in 1943.[79] The 2nd Aviation Division of Special Designation was also specifically tasked with guerrilla support as well as other missions like the transport of high ranking military and civilian officials and foreign representatives.[80] The extensive use of Civil Aviation in guerrilla support is particularly notable, with civil aircraft landing and dropping cargoes of all types in enemy rear areas, and also evacuating wounded from behind enemy lines.[81] The practice of using civil aircraft as arms carriers in widely varying circumstances remained an active one, of course, with civil transport resources employed as overt and covert military cargo carriers around the world.

Postwar retrospectives present in some detail the tonnages and types of deliveries made during various resupply operations, setting out an aerial resupply effort that, for the time, circumstances, and technical capabilities of available aircraft, was of substantial scope and scale. In particular, it led to a correlation of supply with the level and effectiveness of guerrilla activity even when materiel was introduced incrementally. In supporting the Belorussian partisan effort, for example, military and civil aviation resources delivered some 2,400 tons of military cargo to enemy rear areas over three years of war (July 1941–July 1944).[82] The tonnages—which had a demonstrable impact on guerrilla capabilities—are more impressive when one considers that they were delivered by single or small numbers of aircraft, often flying at night and without air cover, guided by unreliable radio communications, and landing or dropping their cargoes at hastily prepared, poorly designated airstrips or drop zones deep in enemy rear areas.

Looking more narrowly at the aerial resupply of Belorussian guerrillas and its impact, in the second half of April 1943, aviation resources of various types delivered some 282 tons of ammunition

and weapons. This contributed in a major way to the guerrillas' level of activity, which on the basis of incomplete data consisted at least of derailing 250 trains, killing 12,000 enemy troops and "traitors to the Motherland," blowing up 87 rail and highway bridges, defeating a dozen enemy garrisons, and capturing some 35 supply depots.[83] The relationship between a supply surge and level of effective guerrilla activity is intuitive, but the reality of what this meant on the ground was impressed on planners then and in the postwar years.

During the course of the war, aviation delivered a broad spectrum of weapons, explosives, and ammunition as well as limited quantities of other supplies to include medical, food, and clothing items. Substantial numbers of personnel were delivered as well, consisting of command cadres and operations groups; radio operators and other critical specialists; separate diversionary-reconnaissance groups (who often only received administrative support from the partisans while conducting their own operations); and reinforcements of various types. Planners gave special attention to the establishment of clandestine airfields and drop zones and their operation. The Central Partisan Staff set up special courses at an airfield near Moscow to train personnel in the construction and operation of such landing areas, after which they were sent to guerrilla formations.[84]

German efforts aimed at disrupting Soviet aerial resupply activity were extensive, as were Soviet countermeasures. German counterintelligence, for example, simulated landing or drop zones by imitating partisan recognition symbols (usually fires or flares), captured active guerrilla airfields in the hopes of enticing planes to land, bombed airfields and intercepted aircraft, and had an extensive ground and air spotting system to determine airdrop and airlanding activity. These efforts enjoyed mixed success.[85] In addition to camouflage, concealment, and various security measures, the partisan resupply efforts incorporated more active countermeasures to discourage German efforts. This included the use of parachute bombs resembling supply containers, but timed to go off after landing, an approach intended "to dampen German enthusiasm for taking supply containers destined for the guerrillas."[86]

Transport aviation support was coordinated by the guerrilla staffs under the army group (*front*) military councils and by the Central Partisan Staff, on the basis of requests made by partisan field forces. Typical in this regard was the following message sent by the Central Partisan Staff to the Chief of the Main Directorate of Civil Aviation:

> I request by your order to send the following by plane: 1) For the Leningrad Staff of the Partisan Movement—50 parachutes; 2) For the partisan detachment, two tons of TNT and ammuni-

> tion in the area of Rabkor station (the location will be subsequently reported).[87]

According to some reports, partisan staffs located with the military councils of army groups had some 15–30 aircraft available to them for supporting guerrilla field forces routinely. More numerous and heavier transports were provided by Civil Aviation and Long-Range Aviation in accord with the process noted above.[88]

As noted, various branches of aviation were used in partisan support with aircraft ranging from heavily employed single-engine biplanes like the U-2 or R-5 found predominately at front level, twin-engine transports like the Douglas C-47 and its Soviet copy the Li-2, and bomber aircraft such as the TB-3.[89] Assault gliders (*desantnyi planer*) were also frequently employed in support missions behind enemy lines, an approach that greatly increased the load carrying capabilities of the single engine biplanes that played such a role in clandestine support missions. Glider pilots were trained at a school run under the auspices of the Soviet Airborne Troops. Sometimes relatively large numbers of gliders were employed in partisan support, as was the case in a 13-day supply and reinforcement operation carried out in behalf of Belorussian guerrillas in 1943.[90] As one Soviet assessment described it:

> The operation began on the night of 7 March and was carried out continuously until 20 March. It involved 65 A-7 and G-11 gliders [with capacities of 7 and 11 men or comparable cargo, respectively]. The guerrillas received 60 tons of combat cargo, 5 printing presses and 10 radios, 106 leadership personnel were provided, a complement of 105 guards-demolition specialists was landed, and separate diversionary groups assault-landed in the rear.[91]

Other large or sustained glider support efforts were carried out in behalf of the partisans as well.[92]

Sustainment and Special Operation-Guerrilla Interaction

Far less has been written about the support of the many special operations detachments and groups that were employed behind German lines during the course of the war, though assessments of their operations generally are substantial. As mentioned, many of these efforts were associated with guerrilla support and informed postwar approaches and techniques for the sustainment of remote detachments, the training of guerrilla cadres, and the close linkage between special operations forces and guerrilla interaction.

During the course of the war, in illustration, the Soviets formed units on the basis of specially trained engineer troops called "separate guards battalions of *miners*" (explosive/demolition specialists that were created to undertake complex demolition and diversionary-reconnaissance missions in enemy rear areas).[93] This is the dimension of operation in which Il'ya Starinov played such a major role. These personnel operated in small groups, usually in association with partisans. They helped train guerrilla demolition specialists, from whom they in turn received support and target intelligence.

For example, the "guards-demolition specialists," landed by glider in March 1943 (noted above), were almost certainly from a so-called guards battalion of *miners*, possibly the 9th Separate Guards Battalion of Miners, which had elements parachute into the enemy rear northwest of Novorzhev at this same time.[94] In any event, aerial resupply of these special engineer units was conducted typically by paradrop and airlanding by powered aircraft and gliders, including small-scale drops to isolated forces. A 23-man element of the 6th Guards Battalion of Miners for example, was resupplied by a single aircraft with ammunition, canned goods, and sugar on a night parachute drop in October 1944 during the Petsamo-Kirkenes strategic operation.[95]

Special operations detachments of the so-called Separate Motorized Rifle Brigade of Special Designation (OMSBON in the Russian acronym) operated both separately and with partisan units. OMSBON detachments, in fact, sometimes served as the basis for establishing what became large guerrilla formations.[96] These elements and their aviation support were closely analogous to Office of Strategic Services (OSS) Jedburgh Teams and Operational Groups, as well as British Special Operations Executive (SOE) squadrons, in their composition and "spies and supplies" activities. The OMSBON security service organization, subordinate to the People's Commissariat of Internal Affairs (NKVD) in the KGB and MVD lineage, was among the most active special operations units during the war, with its elements usually operating as small teams throughout enemy rear areas. Its very existence was kept a secret until well after the war's end, and its history and experience for special operations direct action is instructive in its own right. These elements, as well as other special operations detachments and teams, relied heavily on aviation support of the same kinds described above.[97]

Soviet special operations personnel and partisans played a major role in organizing and supplying resistance groups and formations beyond Soviet borders. While this effort was most widespread in those East European countries that now constitute the Warsaw Pact, some Soviet personnel also participated in resistance activity

in Yugoslavia, Greece, Albania, Italy, and France. Soviet activities in Eastern Europe in particular included large numbers of paradrops/airlanding of troops and supplies, an effort that has been set out in some detail by Vladimir Andrianov and others.[98]

An important participant in much of this activity was Major P. M. Mikhailov, a transport aviation pilot who flew missions into deep enemy rear areas and was awarded the title of Hero of the Soviet Union for his wartime service. His assignments during this time included commanding an air transport squadron in an "Aviation Group of Special (*Osobogo*) Designation."[99] Among his 520 combat missions were 70 night landings at partisan airfields for delivering supplies and evacuating casualties. He made some 65 flights into Yugoslavia in support of the Yugoslav National Liberation Army, as well as flying missions for Albanian and Greek partisans. His aviation unit during this period was based near Ban, Italy.[100]

The war's end left Soviet planners with a vast body of materials that, as addressed above, they quickly began to organize, synthesize, incorporate into security and military training courses and to apply around the world in the postwar period. The work of exploiting this material was still underway when the USSR dissolved, and new materials ranging from finished scholarly treatments to raw archive material continue to become available. While Colonel Starinov's "sabotage school," established in the early postwar years for training Soviet and foreign specialists, was at least publicly disbanded in 1992 with the fall of the USSR, that has not been the case with the lessons learned and formulated over many decades.[101] In contemporary Russian (and other USSR successor state) writings, the use of World War II experience continues to hold a solid place in security and military studies, and is often linked to its lessons for guerrilla war in the Caucasus and elsewhere. The experience is potentially valuable to US specialists as well, some of the reason for which are set out below.

Conclusions

The guerrilla logistic and support activities reviewed above have value that falls into several areas.[102] Historically, the Soviet World War II guerrilla, or partisan, movement was arguably the most extensive and variegated experience occurring in any single, sustained conflict. Collectively, it constituted as "classic" a series of accounts of guerrilla success and failures—and their logistic underpinnings—as any other insurgencies for the lessons it yields. The nearly five years of intense guerrilla operations encompassed hundreds of thousands of participants operating in mountains, forests, swamps, plains, along

coastal areas, in cities, and in climatic conditions that ranged from the arctic to the Black Sea.

The value of this material was as immediately clear to Soviet planners at the end of the war, as it was at the time to the US and its allies who were focused on war in Europe and more broadly central Eurasia. While that interest in "European guerrillas" waned as the Cold War progressed and mostly disappeared from Western visibility, Soviet planners almost from the onset judged it to be invaluable for applying in far-distant areas of the world under widely varying circumstances. The application of World War II guerrilla experience to postwar insurgent support is demonstrable. Through efforts such as the MVD (soon transitioned to KGB) Organization and the Tactics of Partisan Warfare group it was systematized, explicitly described by participants, and characterized as an essential source of theory and practice in developing optimum solutions to analogous "small" armed conflicts and the employment, logistics and support problems of foreign guerrillas and for friendly special operations forces. Its pertinence for guerrilla conflicts like those in Chechnya and the Caucasus continues to be cited by old Soviet veterans and current Russian specialists alike. In addition, the creation of several generations of Soviet/allied-trained cadres left a legacy that outlasted the USSR, since many are still active in their respective terrorist or guerrilla groups.

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Whether guerrilla support approaches 1) are still reflected in the practices of active insurgencies, 2) are in general ways at least analogous to current practices, or 3) simply reflect the innovative ways a large guerrilla movement attempted to solve employment and support problems in a variety of operational settings, the rich body of study and experience merits attention. Reasons for studying it include the potential for an enhanced understanding of how to slow and prevent the development of small guerrilla groups into more robust, effective armed movements, of approaches for how to defeat more mature insurgencies, of the contribution it may make to war-gaming and modeling, of another view of guerrilla support observations and lessons learned, of a wealth of illustrative field-craft that in many cases seems quite current, and serve as an input into the contemporary challenge of developing a range of countermeasures.

As discussed earlier, an examination of insurgencies and the activities of large terrorist groups from the Greek Civil War to al-Qaeda suggest some key elements of guerrilla sustainment that require continuing study and understanding. It may be worthwhile in regard to how the Soviet World War II guerrilla contributed background or ideas, to briefly revisit these and note some parallels:

- **Local and external support dimensions:** In World War II and in the postwar period, planners studied and discussed the relative contribution of support provided from local resources and dispatched from external sources. The changing roles of preestablished supply caches in likely guerrilla operating areas, captured materiel, unit fabrication, acquisition of local civilian resources, and external support via all means of transportation were studied and assessed in the postwar period.
- **Supply networks and repair, bases and caches:** Extensive attention was given during the war and in the postwar period to the optimum configuration and distribution of weapons and materiel storage facilities in the field. Basing, personnel accommodations, and medical facilities were all given consideration and study in the engineering sense and the ways that they could most successfully support guerrilla operations. The judgment from Iraq today that the Syrian/Iraqi supply effort is "based on the principle of 'tiers of networks' and personal relations by organizers who learned from the Chechen or Afghan networks" does not seem far removed from the complexities of some World War II partisan operating areas—certainly not in regard to German bemusement at the time.
- **Logistic cadre and infrastructure development:** The organization of guerrilla units placed a premium on establishing individuals and groups responsible for the acquisition, storage, repair, and distribution of resources. The logistic cells and departments in guerrilla units and formations were essential to their combat effectiveness throughout the war. At the "strategic" level, the partisan support infrastructure was highly developed and controlled, and was able to integrate diverse military and civil structures in the overall logistic support efforts.
- **Transportation:** The mix of transport means—human, animal, motor vehicle, boat, aviation, and , on occasion train—are all treated in assessments in accord with the area and resources available. The combined use of remote roads and trails, light motor-powered boats, light planes flying at low altitudes to isolated fields, paradrops of materiel, and secret bases could be

as easily associated with guerrilla support in the Crimea, for example, as in Central America.

- **Concealment and deception:** Encompassed by the term *maskirovka*, the camouflage, concealment and deception measures associated with logistic support (and other dimensions of guerrilla operations) was developed and improved throughout the war. Dummy bases, clandestine supply routes, false airdrops, and other measures helped obscure and protect the level of materiel arriving in guerrilla areas, and with some frequency contributed to enemy surprise when guerrilla strength and sustainment were revealed.
- **Fabrication of mines and explosive devices and weapons repair:** One of the most important dimensions of support within guerrilla units and formations was the fabrication of explosive devices of various types. The creation of innovative and highly productive mine and explosive manufacturing and assembly facilities resulted in a most effective campaign against German railroad supply, road traffic, and buildings. Weapons repair was critical as well, particularly in areas were local and external supply was limited.
- **Technology applications:** Wartime guerrilla support featured a continuing effort to design and improve materiel meeting the special needs of guerrilla (and special operations) forces. This included in particular remote demolition mines and explosives, new fuses and detonation devices, radio and other communications means, supply containers, etc.
- **Rural, urban and maritime aspects:** With guerrilla activities covering such extensive areas, logistic support, the full range of materiel (consumable supplies) technical (repair and equipment supply) and medical support had peculiarities treated according to the region. This applied to transport in particular and was treated in detail in "rear service" assessments.
- **Administering guerrilla support and operational areas:** Maintaining firm (Communist Party) control over the activities of guerrilla units was a lesson integral to wartime and postwar approaches. The elaborate system of controls and checks was by the testimony of German forces enormously effective in winning support in a number of occupied areas.
- **Interaction with external groups:** Throughout the war, guerrilla units and formations interacted with special operations cadre elements introduced into operating areas to train guerrillas, form new guerrilla groups, or use the support bases of existing partisan formations for undertaking intelligence gathering

or direct action missions. Guerrilla units also interacted with neighboring units and regular military forces, which exchanged materiel and other support. Soviet partisan units that moved beyond USSR borders into neighboring states near the end of the war helped establish lines of communications and supply infrastructure.

- **Printing and disseminating directives, training, and propaganda materials:** The operation of "underground" printing plants and the distribution of propaganda leaflets, training materials and directives were essential to partisan logistic support particularly since they depended on at least the neutrality and usually the more active support of the local populace. The printing plants, paper, and ink supplied along with their operation are part of the guerrilla experience considered in retrospective assessments.
- **Financial and money-raising approaches and techniques:** While today's sophisticated financial systems, cash flows and money laundering did not exist for Soviet guerrillas in World War II, the practice of expropriating resources that sometimes included currency—or being provided with negotiable assets—was well known. Careful Party accountability was specified and the experience and approach have been described in postwar assessments.
- **Logistic support for phased guerrilla movement growth into a near-regular or conventional force:** Postwar analysts of the partisan experience noted the particular importance of providing materiel and equipment in phased ways that allowed small cells to develop into detachments, battalions, brigades and eventually formations approaching regular units in capability. Examples of this are addressed throughout the literature and were certainly paralleled by yet-to-be-released classified assessments addressing specific plans for the Third World movements that were the objects of their support.

Overall, access to much of the experience addressed above is more available now to English-speaking specialists than it has been in the past.[103] In addition, archival material continues to become available, resources that will be increasingly valuable as they push into the postwar years and approach the present. While far from the definitive word on guerrilla logistics and support, the material now available more than justifies the investment of time to review and may pay dividends when considered in light of current requirements to understand the complexities of sustaining insurgency and terrorism.

Endnotes

1 A.I. Kolpakidi and D.P. Prokhorov, *Vneshnaya razvedka Rossii* (The Foreign Intelligence Service of Russia), Saint Petersburg, 2001, p.80, as cited at <http://wwics.si.edu/index.cfm?topic_id=1409&fuseaction=topics.item&news_id=105150>

2 There haven't been many inspiring lines to mobilize the enthusiasm of laboring logisticians. Winston Churchill's 1898 tribute to British and Egyptian transport, supply, and effective lines of communication in the Nile Campaign still constitutes the most-quoted passage on the value of logistics: "Victory is the beautiful, bright coloured flower. Transport is the stem without which it could never have blossomed." For our main Cold War opponent, V. I. Lenin's far less elegant and mildly humorous (in English) dictate that "to wage war successfully you must have a well-organized rear" was a similar catch-phrase among Soviet rear service personnel for decades. See Winston S. Churchill, *The River War: An Historical Account of the Reconquest of the Soudan*, Classic Books, 2001. The chapter on logistics (Chapter VIII, "The Desert Railway") is still well worth reading and, with the rest of the1902 edition, is available at http://www.gutenberg.org/dirs/etext04/7rivr10.txt .

3 Martin Van Crevald, *Supplying War: Logistics From Wallenstein to Patton*, Cambridge: Cambridge University Press, 1977.

4 John A. Lynn, ed. *Feeding Mars: Logistics in Western Warfare from the Middle Ages to the Present*, Boulder, CO: Westview Press, 1994. For works dealing largely with the US, the Naval War College Press, Newport Rhode Island, reprinted four classic logistic works recommended for general military readers that include: George C. Thorpe, *Pure Logistics* (1977); Duncan S. Ballantine, U.S. Naval Logistics in the Second World War (1998); Worrall R. Carter, Beans, *Bullets and Black Oil* (1998); Henry E. Eccles, *Logistics in the National Defense* (1997). These works are reviewed in David Schrady, "Reading Logistics," *Joint Forces Quarterly*, Autumn 2002. The instructive assessment by William G., Lt. General Pagonis and Jeffrey L. Cruikshank, *Moving Mountains: Lessons in Leadership and Logistics from the Gulf War*, Boston: Harvard Business School Press, 1994 recounts one of the great logistic efforts of history.

5 "Guerrilla" or "insurgent" along with the word "partisan" are used interchangeably in this paper to convey, as the Russians do, a broader sense of the topic than the more European-associated "partisan" that appears in most English language writings on the guerrilla movements of the USSR, Yugoslavia, Greece and other European states. In Russian (and formerly Soviet) writings, partisan (*partizan*) is the term of choice for Third World guerrillas or insurgents. The Revolutionary Armed Forces of Colombia (FARC) , for example, is a "partisan movement" (*partizanskoye dvizheniye*) as was the Farabundo Marti National Liberation Front of El Salvador.

6 Charles R. Shrader, *The Withered Vine: Logistics and the Communist Insurgency in Greece*, 1945-1949, Westport, CT: Praeger, 1999. Sev-

eral other excellent works by Shrader dealing with military logistics for regular forces include: *The First Helicopter War: Logistics and Mobility in Algeria, 1954-1962*, Westport, CT: Praeger, 1999. While dealing with a regular military force, Schrader's *Communist Logistics in the Korean War,* Westport, CT: Greenwood Press, 1995, is fine focused treatment of North Korean Army logistics.

7 In particular see Shrader, *Withered Vine,* Chapters 5, "The Greek Democratic Army: Manpower and Logistics," and Chapter 8, "Logistics and the Failure of the Insurrection in Greece."

8 Jose Angel Moroni Bracamonte and David E. Spencer, *Strategy and Tactics of the Salvadoran FMLN Guerrillas: Last Battle of the Cold War, Blueprint for Future Conflicts*, Westport, CT: Praeger, 1995. See in particular Chapter 9, "Guerrilla Logistics/Support/Sanctuary."

9 Ibid., p. 186.

10 Ernesto 'Che' Guevara, *Bolivian Diary*, Introduction by Fidel Castro, trans. by Carlos P. Hansen and Andrew Sinclair, London: Jonathan Cape/Lorrimer, 1968 (a translation of the "official" Cuban version published in Havana that same year).

11 Carlos Marighella, *The Minimanual of the Urban Guerrilla*, June 1969, Sao Paulo, Brazil. (On-line at http://www.military-media.com/download/mini.pdf)

12 Daniel L. Byman, et al, *Trends in Outside Support of Insurgent Movements (1991-2000)*, Santa Monica: The Rand Corporation, 2001, MR-1405-OTI.

13 Kim Cragin, Bruce Hoffman, *Arms Trafficking and Colombia*, Santa Monica: The Rand Corporation, 2003, MR-1468-DIA.

14 Brian A. Jackson, et al, *Aptitude for Destruction: Organizational Learning in Terrorist Groups and its Implications for Combating Terrorism*, Volume I, Santa Monica: The Rand Corporation, 2005, MG-331-NIJ; and *Aptitude for Destruction: Case Studies of Organizational learning in Five Terrorist Groups*, Volume II, Santa Monica: The Rand Corporation, 2005, MG-332-NIJ.

15 Ibid.

16 The explosions were evidently caused during a mishap when some weapons or explosives were being transferred from the arsenal to a waiting vehicle. Among the best sources dealing with the Managua Taller Santa Rosa explosions are: Roberto Orozco B., "Etarra de leva en Nicaragua," *La Prensa*, received via Internet; "'Paticorto,' presunto jefe del aparato logístico de ETA" *El Mundo*, 26 November 2001; "En la Indefinicion Esta la Clave," *Envio*, no. 138, June 1993; Tim Johnson, "Blast Blows Kidnapping Ring's Cover—Sandinistas' Role Questioned," *The Miami Herald*, 20 June 1993; and Douglas Farah, "Managua Blasts Rip Lid Off Secrets; Salvadoran Rebel Cache, Leftist Kidnap Data Exposed; Sandinistas Implicated," *Washington Post*, 14 July 1993; and Reed Irvine, ed., Sandinista Link to New York Plots?" *Accuracy in Media Report*, 13 July 1993.

17 "El gran negocio de la guerrilla," *Semana*, 7-14 July 1992, No. 531, p. 26-32.

18 See *Military Studies in the Jihad Against the Tyrants* in the "Declaration of Jihad Against the Country's Tyrants Military Series," a document entered in evidence at the trial for the African Embassy bombings, Southern District Court, New York City Attorney General's Office, circa early to mid-1990s, in translation from Arabic. The pertinent "Seventh Lesson—Weapons: Measures Related to Buying and Transporting Them," pp. 19-23.

19 Much of this was set out in the postwar US Department of the Army "Historical Study" series based on German records and compiled by German officers working with US officers. See for example, Department of the Army, *Rear Area Security in Russia—The Soviet Second Front Behind German Lines*, No. 20-240, July 1952.

20 Great Soviet Encyclopedia, http://www.booksite.ru/fulltext/1/001/008/087/173.htm.

21 Soviet participation in the Russian Civil War, Spanish Civil War, and Finnish "Winter War" before also informed this base of experience as Soviet and Russian planners pointed out.

22 The subsequent availability of some Soviet archive materials following the fall of the USSR has increased this knowledge further.

23 See Il'ya G. Starinov, *Il'ya Starinov: Soldat stoletiya* [Soldier of the Century], General Editor I.I. Komarova, Moscow: 2002; and Il'ya G. Starinov, *Over the Abyss*, New York: Ballantine Books, 1995. His first wife of 48 years, also a demolitions expert he met in Spain, wrote her own account in Anna Starinov, *Behind Fascist Lines : A Firsthand Account of Guerrilla Warfare During the Spanish Revolution*, New York: Ballantine Books, 2001.

24 D.L. Podushkov, "Spetsnaz rozhdalsya na Tverskoy zemle" [Spetsnaz Was Born on Tver Territory], on-line at http://starina.library.tver.ru/us-007.htm.

25 Ibid., The 350-kilogram explosive device was buried at a depth of 2 meters in the basement of a house the general and other officers were expected to occupy. A decoy mine—intended to be discovered and thus end continued searches—was also planted.

26 Mikhailovich Ptichkin, "The GRU Spetsnaz Is the Elite of the Russian Armed Forces: Spetsnaz Reconnaissance Team Competitions Were Held in Leningrad MD", *Voyenno-Promyshlennyy Kuryer*, 10 Aug 2005 (as translated by FBIS CEP20050811949001).

27 Initiatives for creating and supporting guerrilla groups around the USSR's periphery were underway at this time. For example, the wartime head of the NKVD Administration for Special Tasks, Pavel Sudoplatov, recalled in his memoirs 50 years after the war ended that "during most of 1948 I was preoccupied with the Berlin crisis and establishing a Kurdish guerrilla network in Iran, Iraq, and Turkey with the goal of overthrowing the government of Nuri Said and Faisal in Iraq." See Pavel and Anatoli Sudoplatov, et al, *Special Tasks*, Boston: Back Bay Books, 1995, p. 297.

28 "Sozdaniye Kursov uslovershenstvovaniya ofitserskogo sostava" [Creating the USSR KGB Improved Officer Corps Courses (KUOS)], 3 April

2003, received via Internet at http://www.kaskad.odessa.net/fondB.html.

29 Vladimir Mukhin, "Nord-Ost-2: North Ossetian Version; Special Professionalism Needed To Fight Terrorists", *Nezavisimaya Gazeta*, 2 September 2004.

30 Soviet theorists distinguished between local war (*lokal'naia voina)* and military conflict (*voennyi konflikt)* in terms of scope and scale. As defined in I. E. Shavrov, *Lokal'nye voiny istoriia i sovremennost* [Local Wars: History and Contemporary Times] Moscow: Voenizdat, 1981, pp. 8-9, local wars are characterized by "a relatively limited political objective, which determines a certain limit on the scale of military operations, a specific strategy and tactics, and limited use of weaponry," while "a military conflict is an armed clash which is characterized, in contrast to a local war, by a significantly smaller scale and smaller quantity of forces involved in the actions." Both forms, in the Soviet view, stem from imperialism's efforts to enhance its strategic position, push back socialism and crush progressive forces around the world.

31 U. S. Department of Defense, *Soviet Military Power*, sixth edition (Washington, DC: Government Printing Office, 1987); and U. S. Department of Defense, *Soviet Military Power*, seventh edition (Washington, D. C.: Government Printing Office, 1988), hereafter cited as *SMP-87* and *SMP-88* respectively.

32 SMP-88 pp. 29-30.

33 SMP-87 pp. 128.

34 I. E. Shavrov, "Lokal'nye voiny i ikh mesto v global'noi strategii imperializina"[Local wars and their place in the global strategy of imperialism], *Voenno-istoricheskii zhurnal* [Military-historical journal, hereafter cited as *VIZh* (March 1975), pp. 57-66, and (April 1975), pp. 90-97.

35 Many articles from *Voennaia mysl* [Military thought] up to 1973 were translated by Foreign Press Digest and are openly available. Local wars and their lessons were also addressed in some detail in classified instructional material presented at the Voroshilov General Staff Academy. See, for example, the material on local wars presented. in the lecture, "Principles and Content of Military Strategy" reproduced in *The Journal of Soviet Military Studies* Vol. 1 (April 1988), pp. 46-49.

36 M. Kir'ian, "Prospektivnaia tematika voenno-istoricheskikh issledovanii na 1981-1991 gg." [Prospective military-historical research themes for 1981-1990], *VIZh* (May 1981), pp.44-47, and (June 1981), pp. 59-61.

37 Among these topics were "the strategy and tactics of counterinsurgency activity of the American imperialists in Indochina (1960-1975);" "the development of tactical aviation in local wars (tactical and army aviation);" "urgent problems of organizing the armed defense of national liberation revolutions;" "development of the means of conducting combat actions in the course of local wars;" and "features of military structure in countries moving on the path of a revolutionary transformation of society."

38 Up to that time, most of these works have been memoirs of various types, which in many respects give more insight into the complexities, successes, and failures of Soviet unconventional warfare efforts in World War II than do official dispatches.

39 The first identified article in this regard is V. Andrianov, "Sovetskie partizany za rubezhom" [Soviet partisans beyond the border], *VIZh* (September 1961), pp.17-32, while one of the later treatments is V. N. Andrianov, "Internatsional'naia pomoshch' sovetskikh partizan antifashistskomu dvizheniiu stran Tsentrai'noi i Iugo-Vostochnoi Evropy" [International assistance of Soviet partisans to the antifascist movement of countries of Central and South-Eastern Europe), *VIZh* (July 1988), pp. 30-37.

40 V. Andrianov, "Organizatsionnaia struktura partizanskikh formirovanii v body voiny" [The organizational structure of partisan formations in the war years], *VIZh* (January 1984), pp. 38-46.

41 Ibid., p. 40.

42 Ibid., pp. 46 and 43.

43 Ibid., p. 46.

44 A. D. Zharikov, "'Bol'shaia zemlia' snabzhaet partizan" ['Boi'shaia zemlia' supplies the guerrillas], *Voprosy istorii* [Questions of history] (April 1973), p. 121. "Bol'shaia zemlia" may be translated as "Great Land."

45 B. Dolgotovich, "0 material'no-tekhnicheskom ohespechenii partizanskikh formirovanii Belorussii" [On the materiel-technical support of guerrilla formations in Belorussia], *VIZh* (May 1983), p. 30.

46 Ibid.

47 "Explosive NKVD Legacy Hidden under Moscow Architecture," *Moscow News*, 15 July 2005, received via Internet. The man recalled that his father had told him of a number of such caches in Moscow buildings, sparking justified concern among some Moscovites that that they too remained hidden and forgotten.

48 Zharikov, "Bol'shaia zemlia," pp. 121-122.

49 Ibid., and Dolgotovich, "On Materiel-Technical. Support," p. 30.

50 V. Andrianov, "Bazirovanie i material'no-telchnnicheskoe obespechenie partizanskikh formirovanii v body Velikoi Otechestvennoi voiny" [Basing and materiel-technical support of partisan formations in the years of the Great Patriotic war] *VIZh* (May 1972), p. 80.

51 Ibid.

52 Ibid., pp. 80-81.

53 U.S. Department of the Army, Office of the Chief of Military History, draft translation of an assessment by D. Karov and V. Voizhanin, "Supply of Partisan Units During the War, 1941/45," with an evaluation by Franz Halder, no. P-125, 1953, p. 8.

54 See Ibid., pp. 7-10, for a number of anecdotes regarding German effort to discover partisan bases.

55 Andrianov, "Basing," p. 80.

56 Ibid, pp. 80-81.

57 Department of the Army, "Supply of Partisan Units," p. 5.

58 Zharikov, "Bol'shaia zemlia," p. 122.
59 Ibid.
60 Ibid.
61 Dolgotovich, "On Materiel-Technical Support," p. 32.
62 Ibid.
63 Department of the Army, Supply of Partisan Units," p. 32; and US Department of the Army, *Rear Area Security in Russia: The Soviet Second. Front Behind German Lines*, Department, of the Army Pamphlet no. 20-240, Washington, D. G., July 1951, pp. 32-33. this pamphlet is available from the Army's Center for Military History on the Internet at http://www.army.mil/cmh-pg/books/wwii/20240/20-240c.htm.
64 Ibid., pp. 24-25, and Andrianov, "Basing," p. 82.
65 Rear Area Security in Russia, pp. 33-34.
66 Zharikov, "Bol'shaia zemlia," p. 123, V. Andrianov, 'Sovershenstvovanie strategicheskogo i operativnogo ruhovodstva partizanskim dvizheniem" [Improving the strategic and operational leadership of the partisan movement], *VIZh* (December 1982), pp, 22-27; and John Armstrong and Kurt DeWitt, *Organization and Control of the Partisan Movement*, Project "Alexander" Monographs: Volume 4, Headquarters United States Air Force, December 1954.
67 Ibid., p. 123.
68 Ibid., p. 125.
69 Ibid., p. 124.
70 Dolgotovich, "On Materiel-Technical Support," p. 34.
71 Ibid., p, 33.
72 Bernard B. Fall , "The Theory and Practice of Insurgency and Counterinsurgency", *Naval War College Review*, April 1965, received by Internet at http://www.nwc.navy.mil/press/Review/1998/winter/art5-w98.htm
73 Zharikov, "Bol'shaia zemlia," p. 126; and Andrianov, "Basing," p. 83.
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78 Zharikov, "Bol'shaia zemlia," p. 126.
79 Ibid.
80 D. H. Mel'nik, "Aviatsionnye voenno-transportnye formirovaniia osobogo naznacheniia" [Aviation military transport formations of special designation], *VIZh* (March 1986, p. 94.
81 Zharikov, "Bol'shaia zemlia," pp. 126-127; and A. Kniaz'kov, "Deistviia partizan v khode podgotovki i provedeniia Krymskoi nastupatel'noi operatisii" [Actions of guerrillas in the course of preparing and conducting the Crimean offensive operation], *VIZh* (May 1984), p. 31.
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89 Ibid., pp. 29-30.
90 V. Kazakov, "Planery v nebe voiny" [Gliders in the sky of war], *VIZh* (February 1983), pp. 44-45.
91 Ibid.
92 Ibid., p. 45.
93 Ibid., P. 45.
94 For a discussion of these little-studied special operations units, see S. Kh. Agonov, ed., *Inzhenernye voiska sovetskoi arrnii 1918-1945* [Engineer troops of the Soviet Army, 1918-1945] (Moscow: Voenizdat, 1985), pp. 459-462.
95 A. F. Khrenov, *Mosti k pobede* [Bridges to victory] (Moscow: Voenizdat, 1982), p. 323. For other illustrative examples of special operations force support see M. A. Bahikov, *Otriad osobogo naznacheniia* [Detachment of special designation] (Moscow: Sovetskaia Rossiia, 1986), pp. 57 and 167; I. P. Barchenko-Emel'ianov, *Frontovye budni Ribach'ego* [Front-line days of Ribachii] (Murmansk: Knizhnoe izdatel'stvo, 1984), pp. 146-147; and A. G. Golovko, *Vn'ste s flotom* [Together with the fleet] (Moscow: Finansy i Statistika, 1984), p. 241.
96 F. L. Kurlat and L. A. Studnikov, "Brigada osobogo naznacheniia" [Brigade of special designation], *Voprosy istorii* [Questions of history] (September 1982), p. 100.
97 See Ibid., pp. 95-104; and S. A. Vaupshasov, *Na trevozhnykh perekrestkakh* [At troubled crossroads], 3d ed. (Moscow: Politizdat, 1988). Regarding air support for the OMSBON, Kurlat and Studnikov, "Brigade," p. 97, notes: "The insertion of OMSBON special detachments into the enemy rear was accomplished by pilots of the 101st Long-Range Aviation Regiment commanded by Hero of the Soviet Union V. S. Grizodubov. They carried out landings at partisan airfields, transferred wounded soldiers, women and children, German documents captured by agents and underground operatives, and captured German soldiers to Moscow. For the pilots of this regiment and the OMSBON aviation detachment, it was normal to make a flight across a front line of one thousand kilometers or more."
98 See, for example, Andrianov, "Soviet Partisans Beyond the Border;" and Andrianov, "International Assistance of Soviet Partisans," which as noted above, were the first and one of the latest of Andrianov's publications on partisan operations.
99 I. I. Skadov, ed., *Geroi sovetskogo soiuza* [Heroes of the Soviet Union], vol. 2 (Moscow: Voenizdat, 1988), p. 95.

100 Ibid., and L. Zabavskaya, "To Serve People," *SMR*, October 1980, pp. 56-57.

101 "Military Secret," RenTV, 0945 GMT, 21 May 2000.

102 The treatment is far from comprehensive in terms of sources and archives now available on World War II and the postwar period. In addition, it does not include such important antecedents as the Soviet-Finnish "Winter War" (1939-1940), Soviet military assistance to Spain (1936-1939), and the Russian Civil War (1917-1922)—all of which had their lessons to offer to Soviet planners and theorists.

103 For an illustration of the kinds of material becoming available from FSB and other archives, see the review by CIA staff historian Benjamin B. Fischer of V. S. Khristoforov, et al., *Lubyanka in the Days of the Battle for Moscow: Materials from the Organs of State Security SSSR from the Central Archive FSB Russia*, Moscow: Izdatel'skii dom "Zvonnitsa-MG," 2002. 480 pages.